

**Remarks/Arguments:**

**STATUS OF CLAIMS**

Claims 2-6 have been amended; claims 2-7 are currently pending in the application.

**REMARKS**

In the Office Action, the Examiner:

withdrew all of the objections and rejections of the previous Office Action;  
and

rejected claims 2-7 under 35 U.S.C. §103(a) as being unpatentable, i.e.,  
obvious, over the combination of U.S. Patent Application Pub. No.  
20060122839 ("Li-Chun") and U.S. Patent Application Pub. No.  
20040215447 ("Sundareson").

More specifically, the Examiner has rejected claims 2-7 under 35 U.S.C. §103(a) over the combination of Li-Chun and Sundareson. The Examiner has admitted that "Li-Chun doesn't explicitly teach where the sound file is converted from time domain to frequency domain and indexed in frequency domain". However, the Examiner has asserted that Sundareson teaches those elements of the claimed invention and, furthermore, "it would have been obvious to one with ordinary skill in the art at the time of the Applicant's invention to modify Li-Chun's teaching in view of Sundareson's disclosure for the purpose of improving the system".

The Applicant admits that translating signals into the frequency domain is a well-known technique, but this feature is not, by itself, the whole of the claimed invention.

Sundareson uses components found in the frequency domain to automatically classify a compressed sound as belonging to one category or another, as is clear from, e.g., Sundareson's FIG. 5 and paragraph [0026]. More specifically, Sundareson appears to translate the compressed sound into the frequency domain, and then searches for features that can be used to classify the sound as belonging to a particular category.

Whereas Sundareson uses highly subjective, non-standardized, case-dependent perceptual features and extracted features identified from the frequency domain to classify a sound, the present invention uses objective, standardized, predetermined points in the frequency domain to identify the sound. For example, whereas Sundareson uses ambiguous perceptual features such as "bright", "heavy", and "color", the present invention, in one implementation, uses amplitudes at 1 Hz, 10 Hz, and 100 Hz. This distinction results in significant advantages for the claimed invention, as discussed below.

Li-Chun concerns a method of finding landmarks that occur at reproducible locations within a sound and then extracting fingerprints which represent features of the sound at or near the landmark timepoints. As has been established, Li - Chun uses the time domain rather than the frequency domain. Li - Chun stores the fingerprint in a database and sorts; when an unidentified sound is received, Li-Chun trims off the same segment, extracts the fingerprint, and searches the database for the match.

In contrast to both Sundareson and Li-Chun, the claimed invention translates the sound into the frequency domain, identifies a specific set of values from that domain, and then, as discussed in, e.g., paragraph [0018] of the published application, uses them to represent the song as a point, or spatial coordinates, in N-dimensional space. When an unidentified sound is received, geometrical relationships, such as the Pythagorean theorem, can be used to search for nearby sounds. One significant advantage of the claimed invention over the prior art is that even if the received sound is degraded or otherwise damaged, its spatial coordinates will still be sufficiently close to those of the undamaged sound to identify it as a likely match. "Sufficiently close" can be defined as falling within a region having a pre-established geometry surrounding the undamaged sound in N-dimensional space.

This distinguishing feature of the present invention was present in original claim 4 which introduced the limitation of comparing the first points to the second points involving determining a degree of distance between the first points (or spatial coordinates) and the second points. The claims have been amended to further emphasize this and other

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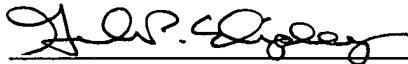
distinguishing features of the present invention. Thus, the Applicant respectfully asserts that the claims are clearly patentably distinguished from the cited prior art references and therefore the rejections have been overcome.

### CONCLUSION

In light of the foregoing, the Applicant respectfully asserts that all claims currently pending in the application are in condition for allowance, and respectfully requests a corresponding Notice of Allowance.

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Respectfully Submitted,

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